Narrow-band imaging detects synchronous oropharyngeal squamous carcinoma during treatment of an early esophageal squamous cell carcinoma

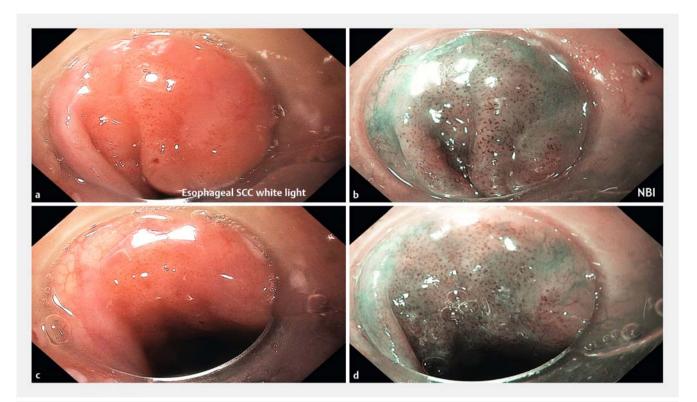


Fig.1 Esophageal epidermoid lesion. **a, c** Appearance with white-light imaging. **b, d** Appearance with narrow-band imaging.

Squamous cell carcinoma (SCC) can appear synchronously in the upper aerodigestive tract and in the esophagus by the mechanism of field cancerization. as tobacco and alcohol are both major risk factors for these lesions [1,2]. Narrowband imaging (NBI) and Lugol chromoendoscopy are the standard techniques for assessment of superficial esophageal lesions, although Lugol staining can lead to adverse events, such as mucosal irritation, allergic reactions, and aspiration, especially in the oropharyngeal area. NBI has proven to be superior to white-light imaging (WLI), with significantly higher diagnostic sensitivity in the detection of superficial mucosal lesions of the esophagus and pharynx [3], by showing altered intrapapillary capillary loop (IPCL) pattern [4].

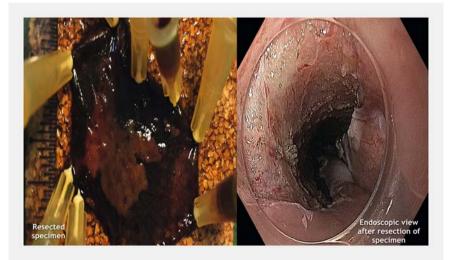


Fig. 2 Resected specimen and endoscopic appearance after resection.

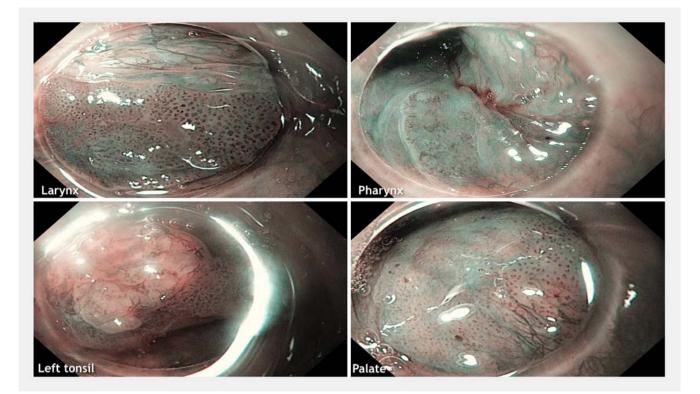
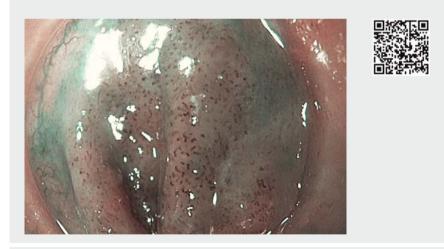


Fig. 3 Narrow-band imaging of lesions in pharynx, larynx, palate, and tonsil.



Video 1 Synchronous oropharyngeal squamous carcinoma detected by narrow-band imaging during treatment of an early esophageal squamous cell carcinoma.

We present here the case of a 58-yearold man who was referred for endoscopic evaluation of the esophagus.

Endoscopic examination found a reddish 2.5-cm anfractuous lesion (► Fig. 1 a) on the front wall of the proximal esophagus. NBI showed IPCL type B1 (► Fig. 1 b). The margins were delineated and endoscopic

submucosal dissection (ESD) was performed, applying the tunnel and clip line technique (▶ Fig. 2) [5]. When withdrawing the endoscope using NBI, multiple SCC lesions were found in the upper aerodigestive tract and oral cavity (▶ Video 1): on palate, right tonsil, pharynx, and left piriform sinus (▶ Fig. 3). These lesions appeared typical with large IPCLs of various shapes (B1 type). Biopsies were taken from all lesions. The histology result from the resected esophageal specimen was in situ SCC without micro-invasion and R0 resection. Palate and tonsil biopsies also showed in situ SCC.

When an esophageal SCC lesion is found, the endoscopist should do a complete examination of the oropharyngeal area in order to detect synchronous lesions, which can be multiple in patients with long tobacco and alcohol use. NBI chromoendoscopy is safe, simple, and reproducible with no risk of aspiration, and should be used as a first-intention imaging technique.

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Competing interests

Dr. Katzarov received a travel grant from the European Society of Gastrointestinal Endoscopy to join our team at Edouard Herriot Hospital for 4 months.

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